

A B S T R A C T

The invention relates to a method of forming the inside wall of a support bearing of given height H and suitable for receiving a cylindrical portion of a cylindrical element for co-operating with the inside wall, said method comprising the steps of estimating a deflection f taken up by the cylindrical element between the center and one of the ends of the support bearing, estimating a nominal radius R using the relationship $R=H^2/8f$, determining an inside wall for the support bearing that occupies a toroidal surface having a throat diameter equal to a diameter of the cylindrical element, ignoring predetermined clearance, and having a meridian radius lying in a range of $\pm 15\%$ about the nominal radius R, and machining the support bearing in such a manner that its inside wall occupies the toroidal surface as determined in this way.